

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended): A ~~vector~~polynucleotide comprising:
 - (a) a polynucleotide encoding an amplifiable selectable ~~marker~~gene;
 - (b) a polynucleotide encoding a green fluorescent protein (GFP)-gene; and
 - (c) a polynucleotide ~~a selected sequence~~ encoding a desired product, wherein the polynucleotide encoding the desired product ~~selected sequence~~ is operably linked to a promoter, and wherein the polynucleotide encoding the desired product ~~selected sequence~~ and the promoter are (i) operably linked to the polynucleotide encoding the amplifiable selectable ~~marker~~gene or (ii) operably linked to the polynucleotide encoding the GFP-gene.
2. (currently amended): The ~~vector~~polynucleotide of claim 1, wherein the amplifiable selectable markergene is selected from the group of consisting of ~~the gene encoding~~ dihydrofolate reductase (DHFR) and ~~the gene encoding~~ glutamine synthetase.
3. (currently amended): The ~~vector~~polynucleotide of claim 2, wherein the amplifiable selectable markergene is ~~the gene encoding~~ DHFR.
4. (currently amended): The ~~vector~~polynucleotide of claim 1, wherein the GFP ~~gene encodes~~ is a mutant GFP.
5. (currently amended): The ~~vector~~polynucleotide of claim 4, wherein the mutant GFP exhibits a higher fluorescence intensity than the wild-type GFP.
6. (currently amended): The ~~vector~~polynucleotide of claim 4, wherein the mutant GFP is GFP-S65T having a serine to threonine substitution in amino acid 65 of the wild-type GFP of *Aequorea victoria*.

7. (cancelled)

8. (currently amended): The vector~~polynucleotide~~ of claim 1, wherein the polynucleotide encoding the amplifiable selectable marker~~gene~~ is fused to the polynucleotide encoding the GFP gene~~to form a fusion polynucleotide~~~~gene~~, wherein the fusion polynucleotide~~gene~~ is operably linked to the promoter.

9. (currently amended): The vector~~polynucleotide~~ of claim 8, wherein the amplifiable selectable marker~~gene~~ is ~~the gene encoding~~ DHFR.

10. (currently amended): The vector~~polynucleotide~~ of claim 8, further comprising an intron between the promoter and the polynucleotide encoding the desired product~~selected sequence~~, the intron defined by a 5' splice donor site and a 3' splice acceptor site.

11. (currently amended): The vector~~polynucleotide~~ of claim 10, wherein the intron provides a splicing efficiency of at least 95%.

12. (currently amended): The vector~~polynucleotide~~ of claim 10, wherein the fusion gene is positioned within the intron.

13. (currently amended): The vector~~polynucleotide~~ of claim 10, further comprising an internal ribosome entry site (IRES) between the selected sequence and the fusion gene.

14. (currently amended): The vector~~polynucleotide~~ of claim 1, further comprising 3' of the promoter: an intron defined by a 5' splice donor site and a 3' splice acceptor site providing a splicing efficiency of at least 95%; and an IRES; wherein the polynucleotide encoding the desired product~~selected sequence~~ is positioned between the intron and the IRES.

15. (currently amended): The vector~~polynucleotide~~ of claim 14, wherein the polynucleotide encoding the amplifiable selectable marker~~gene~~ is positioned in the intron and the polynucleotide encoding the GFP gene~~is positioned 3' of the IRES~~, and wherein the polynucleotide encoding the amplifiable selectable marker~~gene~~ is operably linked to the promoter.

16. (currently amended): The vector~~polynucleotide~~ of claim 14, wherein the polynucleotide encoding the GFP gene is positioned in the intron and the polynucleotide encoding the amplifiable selectable marker gene is positioned 3' of the IRES, and wherein the polynucleotide encoding the GFP gene is operably linked to the promoter.

17. (currently amended): A vector~~polynucleotide~~ comprising: a first transcription unit comprising a first promoter, an intron positioned 3' to the first promoter, and a first polynucleotide encoding a first desired product~~selected sequence~~ positioned 3' to the intron; and a second transcription unit comprising a second promoter and an intron positioned 3' of the second promoter; wherein the intron in the first transcription unit is the first intron, and the intron in the second transcription unit is the second intron, and wherein each of the first and the second introns is defined by a 5' splice donor site and a 3' splice acceptor site providing a splicing efficiency of at least 95%, wherein the vector~~polynucleotide~~ further comprises an polynucleotide encoding an amplifiable selectable marker gene and a polynucleotide encoding the GFP gene, and wherein the first polynucleotide encoding the first desired product~~selected sequence~~ and the first promoter are (i) operably linked to the polynucleotide encoding the amplifiable selectable marker gene or (ii) operably linked to the polynucleotide encoding the GFP gene.

18. (currently amended): The vector~~polynucleotide~~ of claim 17, wherein the polynucleotide encoding the amplifiable selectable marker gene is positioned in the first intron, wherein the polynucleotide encoding the amplifiable selectable marker gene and the polynucleotide encoding the desired product~~selected sequence~~ are both operably linked to the first promoter; and wherein the polynucleotide encoding the GFP gene is positioned 3' of the second intron and operably linked to the second promoter.

19. (currently amended): The vector~~polynucleotide~~ of claim 17, wherein the second transcription unit further comprises a second polynucleotide encoding a second desired product~~selected sequence~~ positioned 3' of the second intron, ~~wherein the selected sequence in the first transcription unit is the first selected sequence, and the selected sequence in the second transcription unit is the second selected sequence, and wherein the second polynucleotide encoding the second desired product~~~~selected sequence~~ is operably linked to the second promoter and encodes a second desired product.

20. (currently amended): The ~~vector~~polynucleotide of claim 19, wherein the polynucleotide encoding the amplifiable selectable marker gene is positioned in the first intron and operably linked to the first promoter, and the polynucleotide encoding the GFP gene is positioned in the second intron and operably linked to the second promoter.
21. (currently amended): The ~~vector~~polynucleotide of claim 19, wherein the polynucleotide encoding the GFP gene is positioned in the first intron and operably linked to the first promoter, and the polynucleotide encoding the amplifiable selectable marker gene is positioned in the second intron and operably linked to the second promoter.
22. (currently amended): The ~~vector~~polynucleotide of claim 19, further comprising an IRES positioned 3' of the second polynucleotide encoding the second desired product~~selected sequence~~.
23. (currently amended): The ~~vector~~polynucleotide of claim 22, wherein the polynucleotide encoding the amplifiable selectable marker gene is positioned in the first intron and operably linked to the first promoter, and the polynucleotide encoding the GFP gene is positioned 3' of the IRES and operably linked to the second promoter.
24. (currently amended): The ~~vector~~polynucleotide of claim 19, wherein the polynucleotide encoding the amplifiable selectable marker gene is fused to the polynucleotide encoding the GFP gene to form a fusion ~~gene~~-polynucleotide positioned in the first intron.
25. (currently amended): The ~~vector~~polynucleotide of claim 24, wherein the second transcription unit further comprises a polynucleotide encoding a selectable marker gene positioned in the second intron and operably linked to the second promoter.
26. (currently amended): The ~~vector~~polynucleotide of claim 19, wherein the first transcription unit further comprises an IRES positioned 3' of the first polynucleotide encoding the first desired product~~selected sequence~~.

27. (currently amended): The vector~~polynucleotide~~ of claim 26, wherein the polynucleotide encoding the amplifiable selectable marker gene and the polynucleotide encoding the GFP gene are fused to form a fusion polynucleotide gene positioned 3' of the IRES and operably linked to the first promoter.
28. (currently amended): The vector~~polynucleotide~~ of claim 27, wherein the second transcription unit further comprises a polynucleotide encoding a selectable marker gene positioned in the second intron and operably linked to the second promoter.
29. (currently amended): The vector~~polynucleotide~~ of claim 26, wherein the second transcription unit further comprises an IRES positioned 3' of the second polynucleotide encoding the second desired product~~selected sequence~~, wherein the IRES in the first transcription unit is the first IRES, and the IRES in the second transcription unit is the second IRES.
30. (currently amended): The vector~~polynucleotide~~ of claim 29, wherein the polynucleotide encoding the amplifiable selectable marker gene is positioned 3' of the first IRES and operably linked to the first promoter, and polynucleotide encoding the GFP gene is positioned 3' of the second IRES and operably linked to the second promoter.
31. (currently amended): The vector~~polynucleotide~~ of claim 19 wherein the first promoter and the second promoter are the same type of promoter.
32. (currently amended): The vector~~polynucleotide~~ of claim 31, wherein the first promoter and the second promoter are the CMV or the SV40 promoter.
33. (currently amended): The vector~~polynucleotide~~ of claim 19, wherein at least one of the promoters is inducible.
34. (currently amended): The vector~~polynucleotide~~ of claim 1, wherein the promoter is the ~~human~~ cytomegalovirus immediate early (CMV) promoter.
35. (canceled)

36. (currently amended): The ~~vector~~polynucleotide of claim 1, wherein the polynucleotide encoding the desired product~~selected sequence~~ encodes a protein selected from the group consisting of neuronotrophin-3, deoxyribonuclease, vascular endothelial growth factor, immunoglobulin and Her2 receptor.

37. (currently amended): The ~~vector~~polynucleotide of claim 19, wherein the first polynucleotide encoding the first desired product~~selected sequence~~ encodes an immunoglobulin heavy chain and the second polynucleotide encoding the second desired product~~selected sequence~~ encodes an immunoglobulin light chain.

38. (currently amended): The ~~vector~~polynucleotide of claim 19, wherein the first polynucleotide encoding the first desired product~~selected sequence~~ encodes one polypeptide chain of a multichain receptor, and the second polynucleotide encoding the second desired product~~selected sequence~~ encodes a second polypeptide chain of the receptor.

39. (currently amended): The ~~vector~~polynucleotide of claim 1 that replicates in a eukaryotic host cell.

40. (currently amended): A ~~vector~~polynucleotide comprising:
a) a polynucleotide encoding an amplifiable selectable marker gene;
b) a polynucleotide encoding a fluorescent protein gene; and
c) a polynucleotide~~selected sequence~~ encoding a desired product, wherein the polynucleotide encoding the desired product~~selected sequence~~ is operably linked to a promoter, and wherein the polynucleotide encoding the desired product~~selected sequence~~ and the promoter are (i) operably linked to the polynucleotide encoding the amplifiable selectable marker gene or (ii) operably linked to the polynucleotide encoding the fluorescent protein gene.

41. (currently amended): A host cell comprising the ~~vector~~polynucleotide of claim 1, 10 or 40.

42. (original): The host cell of claim 41, wherein the cell is a mammalian cell.

43. (original): The host cell of claim 42 wherein the mammalian cell is a Chinese Hamster Ovary (CHO) cell.
44. (currently amended): The host cell of claim 43, wherein the amplifiable selectable markergene is ~~the gene encoding~~ DHFR and the CHO cell has a DHFR-minus phenotype.
45. (original): The host cell of claim 43, wherein the desired product is selected from the group consisting of neuronotrophin-3, deoxyribonuclease, vascular endothelial growth factor, immunoglobulin and Her2 receptor.
46. (currently amended): A kit comprising a container containing the vector~~polynucleotide~~ of claim 1.
47. (currently amended): A method of producing a desired product comprising introducing the vector~~polynucleotide~~ of claim 1, 10, or 40 into a suitable eukaryotic cell, culturing the resultant eukaryotic cell under conditions so as to express the desired product, and recovering the desired product.
48. (original): The method of claim 47 wherein the desired product is recovered from the culture medium.
49. (currently amended): A method of obtaining a cell expressing a desired product, the method comprising:
- a) introducing the vector~~polynucleotide~~ of claim 1 or 10 into a population of eukaryotic cells; and
 - b) isolating the cells of step a) that express the GFP~~the green fluorescent protein gene~~ and the amplifiable selectable markergene, wherein expression of the GFP and the amplifiable selectable marker is indicative of the cell also expressing the desired product.

50. (currently amended): The method of claim 49, wherein the step of isolating cells expressing the GFPgreen fluorescent protein gene comprises sorting for and cloning the brightest 1%-10% of fluorescent cells, wherein the sorting and cloning are performed using a fluorescence activated cell sorter.

51. (original): The method of claim 50, wherein the cells are subjected to two or more rounds of sorting, wherein the cells are cultured for a period of time between each round.

52. (original): The method of claim 51, wherein the cells are cultured for about two weeks between each round of sorting.

53. (currently amended): The method of claim 52, wherein the cells are cultured in selection medium comprising an amplifying agent.

54. (currently amended): The method of claim ~~[[52]]~~51, wherein the brightest 1%-10% of fluorescent cells are cultured in selection medium comprising an ~~appropriate~~ amplifying agent.

55. (canceled)

56. (currently amended): The method of claim 53 or 54, wherein the amplifiable selectable markergene is ~~the gene encoding~~ DHFR and the amplifying agent is methotrexate.

57. (currently amended): The method of claim 54, further comprising analyzing the cells after culture with amplifying agent, for expression of the desired product.

58. (original): The method of claim 57, wherein the cells are analyzed for RNA encoding the desired product by RT-PCR, the amount of RNA indicative of the level of production of the desired product.

59-101 (canceled)

102. (currently amended): The ~~vector~~polynucleotide of claim 1, wherein the polynucleotide encoding the GFP is fused to a polynucleotide encoding a heterologous polypeptide gene is a GFP-fusion gene.

103. (currently amended): The ~~vector~~polynucleotide of claim 1, wherein the desired product~~selected sequence encodes~~ is a protein selected from the group consisting of cytokines, lymphokines, enzymes, antibodies, and receptors.

104. (new): A method of obtaining a cell expressing a desired product, the method comprising:

- a) introducing the vector of claim 40 into a population of eukaryotic cells; and
- b) isolating the cells of step a) that express the fluorescent protein, wherein expression of the fluorescent protein indicative of the cell also expressing the desired product.

105. (new): A method of obtaining a cell expressing a desired product, the method comprising:

- a) introducing the vector of claim 1, 10 or 40 into a population of eukaryotic cells; and
- b) isolating the cells of step a) that express the fluorescent protein, wherein expression of the fluorescent protein is indicative of the cell also expressing the desired product.